

WHAT IS CLAIMED IS:

1 1. A method of operating a radio access network of a telecommunications
2 system, the method comprising using an omnibus release message to release plural
3 connections handled by the radio access network.

1 2. The method of claim 1, wherein the radio access network comprises a radio
2 network control (RNC) node, and wherein the method further comprises:
3 preparing the omnibus release message whereby, when a first selected parameter
4 thereof has a predetermined value, all radio connections controlled by the radio network
5 control (RNC) node are released.

1 3. The method of claim 2, wherein when the first selected parameter is in a
2 reserved range of values, all radio connections controlled by the radio network control
3 (RNC) node are released.

1 4. The method of claim 2, wherein the radio network control (RNC) node is a
2 serving radio network control (SRNC) node, and further comprising preparing the
3 omnibus release message upon failure of the serving radio network control (SRNC)
4 node.

1 5. The method of claim 2, wherein the first selected parameter is included in a
2 mobile terminal global identity information element of the omnibus release message.

1 6. The method of claim 5, wherein the first selected parameter is included in a
2 Radio Network Temporary Identity (U-RNTI) information element of the omnibus
3 release message.

1 7. The method of claim 6, wherein the first selected parameter is a Serving
2 Radio Network Temporary Identity (S-RNTI) information element of the omnibus
3 release message.

1 8. The method of claim 1, wherein the radio access network comprises a radio
2 network control (RNC) node, and wherein the method further comprises:

preparing the omnibus release message whereby, when a first selected parameter thereof has a first predetermined value and a second selected parameter thereof has a second predetermined value, all radio connections in cells controlled by the radio network control (RNC) node are released.

9. The method of claim 8, wherein when the first selected parameter is in a first reserved range of values, all radio connections in cells controlled by the radio network control (RNC) node are released.

10. The method of claim 8, wherein when the second selected parameter is in a second reserved range of values, all radio connections in cells controlled by the radio network control (RNC) node are released.

11. The method of claim 8, wherein the radio network control (RNC) node is a drift radio network control (DRNC) node, and further comprising preparing the omnibus release message upon failure of the drift radio network control (DRNC) node.

12. The method of claim 8, wherein the first selected parameter is included in a mobile terminal global identity information element of the omnibus release message.

13. The method of claim 12, wherein the first selected parameter is included in a Radio Network Temporary Identity (U-RNTI) information element of the omnibus release message.

14. The method of claim 13, wherein the first selected parameter is in a Serving Radio Network Temporary Identity (S-RNTI) information element of the omnibus release message.

15. The method of claim 8, wherein the second selected parameter is included in a parameter which identifies a serving radio network control (SRNC) node.

16. The method of claim 1, further comprising transmitting the omnibus release message on a common control channel (CCCH) when a mobile terminal is in a CELL_FACH state.

1 17. The method of claim 1, further comprising transmitting the omnibus release
2 message on a paging channel (PCH).

1 18. The method of claim 1, wherein the radio access network comprises a
2 serving radio network controller node and a drift radio network controller node, and
3 wherein the method further comprises:

4 sending from the serving radio network controller node to the drift radio network
5 controller node a request for release of connections with mobile terminals controlled by
6 the serving radio network controller node in cells controlled the drift radio network
7 controller node;

8 sending the omnibus release message from the drift radio network controller
9 node to base station(s) controlled by the drift radio network controller node.

1 19. The method of claim 1, wherein the radio access network comprises a
2 serving radio network controller node and a drift radio network controller node, and
3 wherein the method further comprises:

4 receiving at the drift radio network controller node an indication of a loss of
5 connection with the serving radio network controller node;

6 sending the omnibus release message from the drift radio network controller
7 node to base station(s) controlled by the drift radio network controller node with respect
8 to connections with mobile terminals controlled by the serving radio network controller
9 node in cells controlled the drift radio network controller node.

1 20. A radio access network of a telecommunications system, radio access
2 network comprising a radio network control (RNC) node which prepares a omnibus
3 release message to release plural connections handled by the radio access network.

1 21. The radio access network of claim 20, wherein when a first selected
2 parameter of the omnibus release message has a predetermined value, all radio
3 connections controlled by the radio network control (RNC) node are released.

1 22. The radio access network of claim 21, wherein when the first selected
2 parameter is in a reserved range of values, all radio connections controlled by the radio
3 network control (RNC) node are released.

23. The radio access network of claim 21, wherein the radio network control (RNC) node is a serving radio network control (SRNC) node, and wherein the serving radio network control (SRNC) node prepares the omnibus release message upon failure of the serving radio network control (SRNC) node.

24. The radio access network of claim 21, wherein the first selected parameter is included in a mobile terminal global identity information element of the omnibus release message.

25. The radio access network of claim 24, wherein the first selected parameter is included in a Radio Network Temporary Identity (U-RNTI) information element of the omnibus release message.

26. The radio access network of claim 25, wherein the first selected parameter is in a Serving Radio Network Temporary Identity (S-RNTI) information element of the omnibus release message.

27. The radio access network of claim 20, wherein when a first selected parameter of the omnibus release message has a first predetermined value and a second selected parameter of the omnibus release message has a second predetermined value, all radio connections in cells controlled by the radio network control (RNC) node are released.

28. The radio access network of claim 27, wherein when the first selected parameter is in a first reserved range of values, all radio connections in cells controlled by the radio network control (RNC) node are released.

29. The radio access network of claim 27, wherein when the second selected parameter is in a second reserved range of values, all radio connections in cells controlled by the radio network control (RNC) node are released.

30. The radio access network of claim 27, wherein the radio network control (RNC) node is a drift radio network control (DRNC) node, and wherein the drift radio network control (DRNC) node prepares the omnibus release message upon failure of the drift radio network control (DRNC) node.

31. The radio access network of claim 27, wherein the first selected parameter is included in a mobile terminal global identity information element of the omnibus release message.

32. The radio access network of claim 31, wherein the first selected parameter is included in a Radio Network Temporary Identity (U-RNTI) information element of the omnibus release message.

33. The radio access network of claim 32, wherein the first selected parameter is in a Serving Radio Network Temporary Identity (S-RNTI) information element of the omnibus release message.

34. The radio access network of claim 27, wherein the second selected parameter is included in a parameter which identifies a serving radio network control (SRNC) node.

35. The radio access network of claim 20, wherein the omnibus release message is transmitted on a common control channel (CCCH) when a mobile terminal is in a CELL_FACH state.

36. The radio access network of claim 20, wherein the omnibus release message is transmitted on a paging channel (PCH).

*37. The radio access network of claim 20, further comprising a serving radio network controller node and a drift radio network controller node, and wherein the serving radio network controller node sends to the drift radio network controller node a request for release of connections with mobile terminals controlled by the serving radio network controller node in cells controlled the drift radio network controller node; and wherein the drift radio network controller node sends the omnibus release message to base station(s) controlled by the drift radio network controller node.

38. The radio access network of claim 20, further comprising a serving radio network controller node and a drift radio network controller node, wherein the drift radio network controller node receives an indication of a loss of connection with the serving radio network controller node, and thereafter sends the omnibus release

5 message to base station(s) controlled by the drift radio network controller node with
6 respect to connections with mobile terminals controlled by the serving radio network
7 controller node in cells controlled the drift radio network controller node.

1 39. A radio network control (RNC) node of a radio access network of a
2 telecommunications system which prepares a omnibus release message to release plural
3 connections handled by the radio access network.

1 40. The radio network control (RNC) node of claim 39, wherein when a first
2 selected parameter of the omnibus release message has a predetermined value, all radio
3 connections controlled by the radio network control (RNC) node are released.

1 41. The radio network control (RNC) node of claim 40, wherein when the first
2 selected parameter is in a reserved range of values, all radio connections controlled by
3 the radio network control (RNC) node are released.

1 42. The radio network control (RNC) node of claim 41, wherein the radio
2 network control (RNC) node is a serving radio network control (SRNC) node, and
3 wherein the serving radio network control (SRNC) node prepares the omnibus release
4 message upon failure of the serving radio network control (SRNC) node.

1 43. The radio network control (RNC) node of claim 38, wherein the first
2 selected parameter is included in a mobile terminal global identity information element
3 of the omnibus release message.

1 44. The radio network control (RNC) node of claim 43, wherein the first
2 selected parameter is included in a Radio Network Temporary Identity (U-RNTI)
3 information element of the omnibus release message.

1 45. The radio network control (RNC) node of claim 44, wherein the first
2 selected parameter is in a Serving Radio Network Temporary Identity (S-RNTI)
3 information element of the omnibus release message.

1 46. The radio network control (RNC) node of claim 39, wherein when a first
2 selected parameter of the omnibus release message has a first predetermined value and

a second selected parameter of the omnibus release message has a second predetermined value, all radio connections in cells controlled by the radio network control (RNC) node are released.

47. The radio network control (RNC) node of claim 46, wherein when the first selected parameter is in a first reserved range of values, all radio connections in cells controlled by the radio network control (RNC) node are released.

48. The radio network control (RNC) node of claim 46, wherein when the second selected parameter is in a second reserved range of values, all radio connections in cells controlled by the radio network control (RNC) node are released.

49. The radio network control (RNC) node of claim 46, wherein the radio network control (RNC) node is a drift radio network control (DRNC) node, and wherein the drift radio network control (DRNC) node prepares the omnibus release message upon failure of the drift radio network control (DRNC) node.

50. The radio network control (RNC) node of claim 46, wherein the first selected parameter is included in a mobile terminal global identity information element of the omnibus release message.

51. The radio network control (RNC) node of claim 50, wherein the first selected parameter is included in a Radio Network Temporary Identity (U-RNTI) information element of the omnibus release message.

52. The radio network control (RNC) node of claim 51, wherein the first selected parameter is in a Serving Radio Network Temporary Identity (S-RNTI) information element of the omnibus release message.

53. The radio network control (RNC) node of claim 46, wherein the second selected parameter is included in a parameter which identifies a serving radio network control (SRNC) node.

54. The radio network control (RNC) node of claim 39, wherein the omnibus release message is transmitted on a common control channel (CCCH) when a mobile terminal is in a CELL_FACH state.

55. The radio network control (RNC) node of claim 39, wherein the omnibus release message is transmitted on a paging channel (PCH).

56. The radio network control node of claim 39, wherein the radio network control node is a drift radio network control node which receives from a serving radio network control node a request for release of connections with mobile terminals controlled by the serving radio network controller node in cells controlled the drift radio network controller node; and wherein the drift radio network controller node sends the omnibus release message to base station(s) controlled by the drift radio network controller node.

57. The radio network control node of claim 39, wherein the radio network control node is a drift radio network control node which receives an indication of a loss of connection with the serving radio network controller node, and which thereafter sends the omnibus release message to base station(s) controlled by the drift radio network controller node with respect to connections with mobile terminals controlled by the serving radio network controller node in cells controlled the drift radio network controller node.

58. A mobile terminal which, upon receipt of a release message from a radio access network of a telecommunications system, releases its radio connection with the radio access network when a first selected parameter of the omnibus release message has a predetermined value which is not unique to the mobile terminal.

59. The mobile terminal of claim 58, wherein when the first selected parameter is in a reserved range of values, the mobile terminal releases its radio connection with the radio access network.

60. The radio access network of claim 58, wherein the first selected parameter is included in a mobile terminal global identity information element of the omnibus release message.

1 61. The mobile terminal of claim 58, wherein the first selected parameter is
2 included in a Radio Network Temporary Identity (U-RNTI) information element of the
3 release message.

1 62. The mobile terminal of claim 61, wherein the first selected parameter is in a
2 Serving Radio Network Temporary Identity (S-RNTI) information element of the
3 release message.

1 63. The mobile terminal of claim 58, wherein the release message is received
2 on a common control channel (CCCH) when the mobile terminal is in a CELL_FACH
3 state.

1 64. The mobile terminal of claim 58, wherein the release message is received on
2 a paging channel (PCH).